



As shown in the graphic to left, several offices issue severe thunderstorm and/or tornado warnings for Arkansas. The majority of counties (45) are served by the NWS in Little Rock...with NWS offices outside of Arkansas serving the remaining 30 counties.

### Contacts

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MIC - Meteorologist-in-Charge    AMIC - Acting Meteorologist-in-Charge  
WCM - Warning Coordination Meteorologist  
SOO - Science and Operations Officer

**Inversion** - Usually used in reference to temperature; an increase in temperature with height (which is the reverse of what usually occurs in the atmosphere).

**Mammatus clouds** - Rounded, sack-like protrusions hanging from the underside of a cloud (usually a thunderstorm anvil). These clouds do not produce severe weather. They often accompany severe thunderstorms, but may accompany non-severe thunderstorms as well.

**Mesoscale Convective Complex (MCC)** - A large complex of thunderstorms, generally round or oval-shaped, which normally reaches peak intensity at night. An MCC must meet certain criteria for size, duration, and shape. MCCs typically form during the afternoon and evening in the form of several isolated thunderstorms, during which the potential for severe weather is greatest. During peak intensity, the primary threat shifts toward heavy rain and flooding.

**Mesoscale Convective System (MCS)** - A term often used to describe a cluster of thunderstorms that does not meet the size, duration, or shape criteria of an MCC. It is a complex of thunderstorms, which may be round-shaped or in a line, and normally persists for several hours or more.

**Mesocyclone** - A region of rotation, typically 2 to 6 miles in diameter, often found on the southwest part of a supercell. The circulation of a mesocyclone covers an area much larger than the tornado which MAY develop within it. This is technically a radar term defining a signature of rotation on Doppler radar that meets specific criteria for magnitude, vertical depth, and duration.

**Microburst** - A small, concentrated downburst affecting an area less than about 2.5 miles across. Most microbursts are rather short-lived (5 minutes or so), but on rare occasions have been known to last up to 30 minutes.

**Outflow boundary** - A boundary separating thunderstorm-cooled air (outflow) from the surrounding air; similar in effect to a cold front, with the passage marked by a wind shift and usually a drop in temperature. Outflow boundaries may persist for 24 hours or more after the thunderstorms that generated them dissipate, and may travel hundreds of miles from their area of origin. New thunderstorms often develop along outflow boundaries, especially near the point of intersection with another boundary (cold front, dry line, another outflow boundary).

**Overrunning** - Relatively warm moist air moving above another air mass of greater density (colder air). Embedded thunderstorms sometimes develop in such a pattern; severe thunderstorms (mainly with large hail) can occur, but tornadoes are unlikely.

**Pulse storm** - A thunderstorm within which a brief period (pulse) of strong updraft occurs, during and immediately after which the storm produces a short episode of severe weather. These storms generally are not tornado producers, but often produce large hail and/or damaging winds.

**Risks (Severe Thunderstorm)** - The Storm Prediction Center (SPC) assesses risks of severe thunderstorms in its convective outlooks. The risks are for a severe weather event occurring within 25 miles of any given point and are as follows: